SATURDAY, FEBRUARY 20, 1875.

ORIGINAL LECTURES.

ON THE PRINCIPLES WHICH GOVERN THE USE OF ELECTRICITY IN MOTOR PARALYSIS.

An Abstract of a Course of Three Lectures delivered at the University Hospital.

BY H. C. WOOD, JR., M.D.

LECTURE III.

GENTLEMEN,—In our previous lectures we have sufficiently studied the laws of galvanic currents, their effects upon normal muscles, and the methods of their application. To-day we shall consider directly their use in disease. I shall not try to point out in what palsies you shall employ them, but rather give you such principles as will enable you to make your own deductions as to individual cases.

Galvanic currents are employed in paralytic affections for three distinct purposes,—namely, diagnosis, prognosis, and therapeusis. These I shall consider in the order in which they have been enunciated.

There are certain palsies, such as pseudo-muscular hypertrophy, in which the muscular structure is so destroyed independently of any involvement of the nervous system that no response to the galvanic current is possible. All of these palsies are, however, essentially exceedingly chronic, and their diagnosis is to be made out chiefly by a microscopical examination of the muscles themselves. As electricity does not come into play in the diagnosis of these cases, I shall not say more about them. It is otherwise with suddenly-developed paralysis in which the history does not point to any immediate cause, as diphtheria. Often, in such cases, galvanism is of great diagnostic value. As stated in a previous lecture, when a muscle is entirely deprived of the influence of the spinal centres it rapidly loses its electro-contractility, whereas, if a muscle be paralyzed from a lesion of such character or position as not to interfere between it and the trophic cells of the cord, it maintains its integrity for many weeks. When a muscle is degenerating for want of spinal influence, it first loses its power of responding to rapidly-interrupted faradic or chemical currents, then to slowly-interrupted faradic currents, then to slowly-interrupted chemical currents, and lastly to slowly-reversed chemical currents. When, therefore, a muscle loses its power of responding to the rapidly-interrupted faradic current in a week or ten days after the occurrence of paralysis, the inference is very positive that the lesion is either one of the nerve-trunk, or, being of a nerve-centre, is of such a character as seriously to involve the trophic cells of the spinal cord. If a few days later such muscle is unable to respond to any faradic current, this inference becomes a certainty. Under these circumstances the possible lesion is narrowed down to infantile paralysis, a conceivable destructive myelitis, and an affection of a nerve-trunk.

A *myelitis* so rapid and severe as to destroy in a few days a portion of the spinal cord, and consequently the electro-contractility of its tributary muscles, is exceedingly rare, and, if it occurred, could offer no difficulties of diagnosis. In *infantile palsy* the nature of the case is usually but too apparent, although the muscles often lose their electro-contractility as quickly as when a nerve-trunk is severed. Practically, therefore, very rarely is there any difficulty in recognizing the seat of the lesion in acute organic palsies by means of the galvanic test. It may be laid down as a practically invariable rule *that when in the adult a muscle loses to a sensible degree in a few days its electro-contractility, the lesion is in a nerve-trunk.* In recognizing, however, these peripheral palsies, it must not be forgotten that the injury to the nerve may be very deeply situated; even within the membranes or substance of the nerve-centres. This is especially to be borne in mind when it is a cerebral nerve that is affected. Thus, a tumor situated in a superficial portion of the brain may press upon the fibres of a nerve just as they are collecting together previous to leaving the brain, and the result will be a palsy which is really a peripheral one, although the tumor is in the nerve-centre. The persistence of the muscular contractility intact for some weeks after the occurrence of a palsy depending upon an organic lesion, proves that the disease is of cerebral origin, or, being spinal, is of such nature as not to compromise seriously the trophic nerves of the cord.

In applying these rules, you must not forget that whenever a muscle is not used it loses its contractile power, so that even in paralysis from cerebral hemorrhages the muscles finally degenerate, although this degeneration is rarely so complete as in peripheral palsies. It is not the fact of degeneration, but its degree, and especially the period of time which elapses between its occurrence and the commencement of the paralysis, which is the important factor in the diagnosis. In cerebral palsies no distinct loss of functional activity in the muscles is usually perceived sooner than six weeks after the onset of the attack, and even after years have elapsed some response is usually elicited by strong slowly-interrupted or reversed currents.

There are certain palsies in which the electro-muscular contractility is really or apparently above normal. Very frequently the excessive contractions produced are not so markedly in the muscles to which the currents are applied as in other muscles, whose movements are in reality reflex in their nature. In all these cases the probabilities are that there is a condition of acute hyperæmia or of excessive functional irritability of the spinal cord.

In regard to certain so-called functional palsies, the muscles in *lead-paralysis* very generally lose their electro-contractility, and, curiously enough, according to my own observation may recover to a marked degree the power of voluntary motion, without a corresponding restoration of their normal electrical relations.

In *hysterical paralysis* any aid to diagnosis is often of very great value; and it has been asserted that in this class of palsies the preservation of electro-contractility with loss of electro-sensibility is always present, and is of diagnostic value.

My experience, however, is very positive that in hysterical palsy both electro-contractility and electro-sensibility are frequently normal. When, however, in any case the muscle responds to galvanic currents, although the patient is to a great extent, or altogether, insensible to their passage, a very positive diagnosis of hysteria may be given. The electro-contractility is never seriously compromised in hysterical palsy.

In using galvanism as an aid in *prognosis*, the condition of the muscular contractility is always to be considered in conjunction with the nature of the lesion and the length of time it has existed.

Taking first ordinary *hemiplegia* as the type of *cerebral* palsies, it must be borne in mind that the actual existent amount of paralysis is really the product of two essentially different factors. The nerve-centre is primarily damaged, and after a time the muscle also suffers loss of structural integrity from want of use. The restoration of the nerve-centre does not necessarily involve the restoration of the muscle, so that in a case of hemiplegia of some standing, the cerebrum may have recovered itself partially or entirely, and yet the muscle be in such a state of degeneration as to be unable to respond to the impulse transmitted to it from the nerve-centre.

Under these circumstances, galvanic treatment, although unable to affect to any extent the nerve-centres, does great good by restoring the muscular tone. It is manifestly impossible in such a case to determine before treatment how far the nerve-centre has recovered itself, or, in other words, to what extent the existing paralysis is of centric and to what extent it is of muscular origin. When, in a case of apoplectic hemiplegia, there is no recovery at all of the power of voluntary movement after the lapse of six weeks, the prospect of decided improvement from electrical treatment is very gloomy, because the probabilities are altogether in favor of the existence of a serious, persistent centric lesion. If, however, there is some motion, the probabilities of improvement are inversely proportionate to the structural health of the muscles. If the tone and the electro-contractility of these are normal, the centric factor is the chief one in the production of the paralysis, and little good is to be achieved by the use of the galvanic current. On the other hand, if the muscles have undergone a very decided degeneration, much good is to be expected. No hopes of absolute cure should, however, be held out, because in the great majority of cases, after the muscles have been fully restored, the nerve-centre is found to be more or less damaged. The improvement is usually at first rapid, but after a time ceases altogether, because, the muscles having recovered their tone, it is not possible to affect, to any great extent, the sole remaining cause of the paralysis, *i.e.*, the centric lesion. Under these circumstances it is useless to continue treatment.

In *infantile paralysis*, early in the attack the galvanic current is of little value in determining the prognosis, excepting that the general law is, that the more rapidly electro-contractility is lost, the more serious is the case. In advanced cases, the length of duration and the condition of the electro-contractility in the muscles are both to be considered. If no response at all to an electric current can be obtained, the prognosis is always very grave; although even under such circumstances a decided improvement has occurred in a small percentage of the cases I have treated. If the case be an old one, the preservation of some degree of electro-contractility indicates that the structural lesion in the cord is not a fatal one, and as, under these circumstances, the muscles can always be more or less perfectly restored, the prospect of improvement is a very certain one. The preservation of electro-contractility late in the disorder, when the centric lesion is no longer progressing, is of much more import than it is in the first few weeks or months of the case, when the central trouble may be increasing.

In *peripheral palsies* the prognosis depends rather upon the nature of the nerve-lesion than upon the condition of the muscle; but it must be remembered that when a muscle has absolutely lost its power of responding to any electrical current, its restoration is always a matter of difficulty and of doubt.

In regard to *therapeusis*, the first point to be determined in acute cases is very often when to commence electrical treatment. When the lesion is of such nature as not to provoke any irritation of the nerve-centre, no time should be lost. Thus, if a man is unable to use his arm because he has slept with it under his head and thereby paralyzed the nerve by pressure, the electrical treatment should commence at once.

When, however, the lesion is of such character as of necessity to irritate the nerve-centres, the case is different.

The local stimulation of the peripheral nerve-fibres by electrical current does, in some way not yet definitely understood, affect the nutrition of the nerve-centres; and when these nerve-centres are in a state of active excitement or inflammation, a peripheral galvanic irritation may do serious injury to them. Hence the rule that where an acute palsy is connected with active irritation of the nerve-centres, galvanism should not be used upon the muscles until the centric disturbance has subsided. Thus, in *hemiplegia* from cerebral hemorrhage the muscles must be allowed to rest until not only all symptoms of centric irritation have subsided, but until the brain has become so accustomed to the clot that the latter no longer acts as a foreign body. It is usually from three to six weeks before electricity can be used with advantage in these cases. Again, in acute *cerebritis*, *cerebral or spinal meningitis*, and *myelitis*, the use of galvanic currents should be strictly forbidden until a stage is reached when the effects of the inflammation, and not the inflammation itself, are to be dealt with.

When it has been decided to commence the use of galvanism, it is next to be determined what cur-

rent shall be used. You will remember that I have demonstrated to you that there are no inherent mysterious differences in the various currents; yet there is a practical difference, and the clinical rule of choice is, *Always select that current which produces the most muscular contractions with the least amount of pain;* trying the rapidly-interrupted faradic, or, if you have only a chemical battery, chemical current, and the slowly-interrupted faradic or continuous current, and always, when these fail to elicit response, the slowly-reversed chemical current, which, if necessary, may be increased in strength until the patient can no longer bear the pain.

The current having been selected, the individual muscles must be galvanized at each séance.

After what has been said in a previous lecture, it is not necessary to speak to you concerning the best methods of applying the currents to the muscles; but, remember, it is not the electricity directly, but the contractions induced by it, which benefit the palsied parts.

There are certain precautionary rules which must never be lost sight of in the galvanic treatment of palsies. Pain is an evil, and its infliction is always to be avoided as far as possible. Hence the rule never to use stronger currents than is necessary. It is very possible to fatigue a healthy muscle, much more a diseased one. A weak muscle may be greatly injured by being over-fatigued. Hence the rule that currents are not to be applied to muscles so long at one time as to induce fatigue. In general, an electrical séance should last from ten to twenty minutes, no one muscle being subjected to the currents for more than five minutes.

ORIGINAL COMMUNICATIONS.

TWO CASES OF CONGENITAL DEFORMITY.

BY H. C. HAND, M.D.

I. IMPERFORATE ANUS, THE RECTUM OPENING INTO THE VAGINA.

ON the 10th of March, 1874, there was born, of middle-aged and healthy Norwegian parents, a child with the above malformation. It was plump and healthy, and did not seem to be inconvenienced by the abnormal point of discharge for its fæces. At the place where the anus should have been there was a small teat-like projection. A short distance above the hymen the posterior vaginal wall was found wanting, and was absent from this point up to the uterus, the os uteri looking directly into the rectum.

The case was in the medical care of Dr. C. E. Smith, who requested me to undertake its surgical conduct.

On the 3d of April, assisted by Dr. Smith and Dr. D. W. Hand, an attempt was made, as follows, to establish an anus in its natural location. A crucial incision was made through the skin and subjacent tissue to the depth of about three-fourths of an inch; the yielding intestinal wall, being now reached, was steadied by passing the little finger of the left hand in through the vagina upon it, and then divided. The mucous membrane was brought down and stitched to the skin as well as might be; but this was very imperfectly, for, as the anterior wall of the rectum was absent, there was, of course, at that part no mucous membrane to bring down. The rectum formed no pouch below its opening into the vagina, but made a direct course into that canal.

An anus was thus made sufficiently large to admit the little finger. A piece of wax bougie was tied in, and the patient left in good condition. Little or no reactionary fever followed. The bougie was removed, reintroduced, and worn without difficulty until towards the close of the first week, when the mucous membrane, having let go its adhesions below, formed a valve at its original site, which prevented the upward passage of either the wax bougie or the finger.

A large bead was procured, somewhat larger than the desired size of outlet, and fastened to a stout ligature; the other end of the ligature was threaded in an eyed probe, bent into a semicircle. The probe was then passed in at the vagina and out at the anus, through the opening previously made. The probe and ligature were drawn through until the bead was fairly fixed at the termination of the natural rectum, where the valve-like process prevented communication with the incision upward from the anus. The bead was allowed to remain in this position, the ligature being fastened on the back just tight enough to hold it. Several times a day smart traction was made, after which the ligature was re-fastened as before. In three days the bead worked its way through, and came out at the anus. The little finger could now be readily introduced, and from this time onward the mother found no difficulty in introducing her little finger daily. A curious complication arose about four weeks after the operation, in a copious eruption of vaccine vesicles in and about the anus.

Another child at the same time had a vaccine scab on his arm, from which the mother unconsciously vaccinated the baby in this undesirable location. The incision became ulcerated in its entire extent, and for a time it was feared that the septum between the anus and the vagina would be destroyed. But the ulcerative action was stayed without working this mischief.

After the fretfulness from the vaccination wore off, the child did well in every way until the following November. At first, only a little of the fæces passed by the anus, but gradually more and more, until when it lay on its back all generally passed by the anus, while if it defecated when lying on its face more or less would always come through the vagina. Defecation was performed but little oftener than natural.

Towards the close of November, 1874, the parents noticed that the child was not so well as usual, and on the 10th of December it died of meningitis.

If the patient had lived, I think the opening between the vagina and the rectum would have closed spontaneously: at least it was making good progress to that end; or, if it should not have entirely closed, it would at least have become so small that its edges could easily have been pared and united when she had reached the proper age.

II. SPINA BIFIDA WITH CLUBBED FEET.

Mrs. B., a healthy Irishwoman, and the mother of several fine children, on the 10th of January, 1875, after a labor consisting of but one pain, gave birth to a medium-sized and well-nourished child, deformed as follows: In the middle line of its back, opposite the middle lumbar vertebræ, was a flattened rose-like tumor, one and a half inches across its top, one-half inch in height, and having a constricted base. On its base and sides this tumor was covered with skin, but on the upper flat surface the skin was absent, and the appearance given was that of folds of delicate mucous membrane intensely congested, having a purplish hue. This was doubtless an outgrowth from the coverings of the spinal cord. About the centre of this rose there was a depression, from which a few drops of clear liquid frequently escaped.

The muscles of the front of the child's legs and thighs were so much contracted that the legs were constantly held in front of the chest, with the toes almost touching the shoulders. They could be drawn down nearly into a line with the body, but, when let go of, sprang back into their strange position. The knees were so drawn that they bent forwards instead of backwards, the legs and thighs almost forming a semicircle with the convexity at the back of the limb. The toes of each foot were forcibly drawn up towards the ankle, the heel being thus forced down. On one side the toes were strongly turned inwards as well as up, and on the other they were as strongly turned outwards and up.

The anus was pouting and patulous, and fæces were passed frequently and in large quantities.

The child took milk heartily, and seemed to flourish for a week, when, without any unusual escape of cerebro-spinal fluid, or any convulsion, it quite suddenly got cold, seemed to be in severe pain, and died. Unfortunately, there was no chance to examine the body after death, and to preserve its singularly contorted form.

ST. PAUL, MINN., January 28, 1875.

SULPHATE OF QUININE IN PREMATURE LABOR.

BY HARVEY L. BYRD, M.D.,

Late Professor in the Savannah and Oglethorpe Medical Colleges of Georgia, and the Washington University, and College of Physicians and Surgeons of Maryland, etc., etc.

THE following case, having interested the writer to a considerable extent, illustrating and establishing, as it does, more completely the antiperiodic action of one of our most esteemed and reliable remedies, is deemed of sufficient value and importance to the profession at large to warrant its publication in the pages of the *Medical Times*. There has appeared from time to time a disposition on the part of some practitioners to attach parturient properties to the salts of quinine, and particularly the sulphate; and cases have been reported in order to strengthen the idea of its action in that regard. The weight of professional opinion has not preponderated in that direction, however, as may be seen in the daily prescription of this drug in malarial fevers, and, in fact, in all diseases of marked periodicity in their character, without fear of its exerting injurious action on the uterus in regard to gestation. So far from any apprehension of its producing uterine contraction, it is often prescribed for the purpose of *lessening* irritability of that organ. In a professional experience extending over a period of more than thirty years, in all forms and varieties of disease in which quinine is indicated, I have prescribed it alone, or in combination with such other articles as seemed necessary, not only without injury to the pregnant female in *all* stages of gestation, but with marked and positive advantage in those of threatened abortion and premature labor. With this experience in regard to its *modus operandi*, no difficulty was encountered in selecting it as the leading article in the treatment of the particular case soon to be mentioned.

In an office-consultation with Mr. D., one of the most reliable and enterprising merchants of Baltimore, the following facts were elicited in regard to his wife. She was represented as being in the seventh month of utero-gestation, and as having had *seven* successive premature deliveries at the eighth month of pregnancy; and all the children died at or a few hours after birth, except one, which was kept alive, with great difficulty, until the eighth week.

Having been thus unfortunate under the care of other physicians, it was thought that a change to another might give "better luck" this time, and, possibly, the unfortunate eighth-month habit broken up. Learning thus much from Mr. D., his wife was visited the following day, July 12, 1874. She was found to be an intelligent, healthy-looking young lady, of about thirty-two years, sanguine temperament, medium height and size. She stated that in previous pregnancies she had been carefully attended by her physicians, but did not know much of the treatment pursued, beyond the general facts that she had been constantly kept in a recumbent or reclining position for three or four weeks prior to her expected confinements, and almost continuously under the influence of morphia or opium during those periods. This was the general course pursued in all her pregnancies after the second, with the results above stated. The following constituted the course of treatment recommended and continued with the most satisfactory results. Three weeks in advance of her usual mishap, she was directed to surrender the entire care of her domestic affairs into the hands of another, to confine herself to the limits of her bed-chamber, and as much as possible to her bed.

℞ Pulv. aloes Socot., ℈i;
Pulv. rhei, ʒss;
Podophyllin., gr. v;
Bicarb. sodii, gr. vi;
Ext. nuc. vom., gr. iv;
Ol. menth. pip., gtt. i.

Make thirty-five pills. S.—One pill at bedtime to keep the bowels open. During the day, and commencing at 5 A.M., one of the following pills every four hours, until *quininism* is induced, or until four have been taken: ℞ Sulph. quiniæ, ʒss. Make eight pills. Should nervousness occur during the day,—to which she was somewhat subject,—valerianate of quinine in one-grain doses to be substituted for the sulphate. When restless or disinclined to sleep at night,

℞ Bromide potassium,
Hydrate chloral, āā ʒij;
Water, ʒiv.—M.

S.—Take a dessert-spoonful as occasion requires.

The foregoing treatment was continued with little variation, except an occasional dose of compound spirit of lavender when nervous symptoms were not relieved by the other remedies, until about a week after the dreaded crisis was safely passed, when she was permitted to read, sit up, and take gentle exercise about her room. At the commencement of the thirty-eighth week from her last menstruation, labor began, and progressed normally through all its stages, resulting in the safe delivery of Mrs. D. of a healthy and perfectly-formed female infant, of about eight

pounds avoirdupois, in ten hours after it began. This little miss had scarce emerged into the world ere she gave unmistakable evidence of her ability to maintain a separate existence, and probably no mother ever experienced more joy, or had greater hopes inspired by the cry of her new-born babe, than the happy mother on this occasion.

At the date of this writing the child is three months old, and is growing and prospering to the entire satisfaction of all parties concerned.

It is proper to remark, before closing this brief account of an unusually interesting case, that Mrs. D. was in no wise restricted in her diet during the treatment, except in regard to such articles as experience had proven indigestible.

366 N. FREMONT STREET, Jan. 26, 1875.

NOTES OF HOSPITAL PRACTICE.

ALLGEMEINES KRANKENHAUS, VIENNA.

CLINIC OF PROF. KARL BRAUN, NOV. 5, 1874.

CAULIFLOWER EXCRESCENCE—PORTION OF PERITONEUM REMOVED.

GENTLEMEN,—The patient we introduce to you to-day is a married woman, æt. 32, and has borne two children. Her physical appearance is good, and no one would imagine, judging from it, that she was suffering from any serious cachexia. Yet she is laboring under a difficulty which, if not promptly met and treated, will beyond a doubt be fatal in its results.

She tells us that for a period of five months she has been constantly losing blood, not in great quantity, it is true, yet there has been a steady drain upon her system, which threatens sooner or later to undermine her strength; and it is our purpose to-day to make an examination of the trouble, and to do something for its removal.

A vaginal examination reveals, situated upon the anterior lip of the cervix more especially, yet extending nearly the entire distance around it, a new growth, which we have no hesitation in pronouncing, from the peculiar sensation it imparts to the fingers, the hemorrhage which accompanies it, and the entire history of the case, to be an instance of the so-called "cauliflower excrescence."

What, in such a case, should be our treatment? Experience has conclusively proven that nothing short of its radical removal will be of any value. Any attempt short of this will result in a failure, and the condition of the patient subsequently will be even worse than at present. Here it is always better to cut away too much tissue than not enough. A portion of the peritoneum may be removed, proper care being taken in the subsequent treatment, and yet no injury result. In the very many cases here operated upon in the past twenty years, but a very small percentage has been lost, while in many of these the peritoneum has been cut. I operate every year fifteen or twenty times for this difficulty, and often remove a portion of the peritoneum so large that my assistants scratch their heads and say, "He has gone too far this time;" but as they grow older and see these operations again and again repeated with most favorable results, they learn better. The surgeon would object to such an operation, involving the opening of the peritoneal sac, but the gynæcologist, who operates in this region much oftener, knows better what can be done.

As to the instruments used in this operation, I have little at present to say. The operator will be guided by the conditions of the case, or, it may be, by taste, in choosing them. I prefer in these cases the use of the galvano-caustic to all other means, and place the wire so that it shall pass through *perfectly healthy* tissue.

[The operation was here performed, and a large portion of the cervix amputated, the wire passing completely behind the growth, which was about as large as a hulled walnut, removing a portion of Douglas's cul-de-sac.]

You will observe, gentlemen, as this specimen passes around the class, that I have removed quite a considerable portion of peritoneum. It is better to avoid doing this, if possible. I do not think this case required it, and had not intended to touch it, but the folds of the posterior wall of the vagina deceived me. Our subsequent treatment will be very simple. We will use a glycerin tampon, taking care not to introduce it so far that there would be danger of its passing into the abdominal cavity; and no injection whatever will be allowed. The patient will be required to lie as much as possible on her back, the severed tissues being thus thrown more nearly into accurate juxtaposition, and the healing process will be proportionately more rapid.

Nov. 14.—Patient doing very well. There has been no rise in temperature since the operation.

VERSION FOLLOWED BY CRANIOTOMY.

We introduce another patient to you, gentlemen, in labor. She is 23 years of age, strong and healthy; is a primipara; has had strong labor-pains since yesterday, and she is brought into the clinic because my assistant informs me he is not satisfied with the progress the case is making. We will make a vaginal examination, to ascertain in what may be found the difficulty. We find here on introducing the index-finger a conjugate diameter less than that of the normal pelvis, measuring two and three-quarters or at most three inches; a cervix very much elongated, measuring four inches in length, and the external os as yet very imperfectly dilated; a head large and high up, not yet descended into the pelvis, and having the left occipito-anterior position.

We find here, then, conditions which demand our assistance, without which there may occur paralysis or inflammation of the uterus or its rupture. There are here as yet no signs of a rupture of the cervix; but that may take place under conditions which are not usually supposed capable of producing a rupture. I have had a case of premature labor in which rupture of the cervix occurred, the head being only two inches in its biparietal diameter.

I shall here lay the patient upon her right side, and, introducing my left hand, the palm corresponding to the abdomen of the child, endeavor to reach a knee. I find this, however, impossible, and shall introduce my right hand, the patient retaining the same position. I succeed in grasping a foot, and, as you see, bring it down while I pass over it a sling. As the pains again come on I make strong traction on the limb, while my assistant aids me by making pressure on the fundus and sides of the uterus, and we extract as far as the buttocks, when we cease making traction, the gradual extrusion of the body being very necessary for the proper expansion of the mother's soft parts,—the vulva and perineum. The shoulders now having come to the outlet, my attention is directed to the extraction of the arms. Here I find at once that I am unable to deliver the arms in the usual manner by drawing them downward over the face and breast of the child. Both are drawn upward and behind the head, where they are crossed, giving us an instance we do not often meet with, and in which it very frequently becomes necessary to fracture the arms if we would deliver promptly

enough to save the life of the child. In twenty-five years of practice I have had two cases in which I have fractured the arms for this reason. In such unpleasant and yet occasionally unavoidable accidents, treatment by a plaster bandage is very efficacious, and in a month nothing of the fracture can be remarked. Having brought down the arms, we find the head delayed, and all attempts I can make at extraction by manipulation are unavailing. It is very evident that this child cannot be born alive. The pulsations of the cord have already ceased, and no heart-sounds are to be detected. Delivery, however, must not be delayed, and we will at once proceed to the extraction of the child by means of the trepan and cranioclast. Many affirm that we cannot apply these on the after-coming head; but practice says otherwise. I never apply the cephalotribe in these cases, believing that we have in the *curved* trepan and Simpson's *lengthened* cranioclast much more efficacious instruments. The cranioclast preceded by perforation accomplishes all that is necessary. For ten years we have found this Simpson's *lengthened* cranioclast to give more satisfaction than any other, and for twenty years we have found no trepan so good as the one we show you. The fewer instruments you use, the better. In this hospital we find a necessity for only two destructive instruments, which are those we show you, and they, aided by the hand, prove sufficient for every emergency. Considering that from 1849 until 1856 we had four thousand cases of labor annually, and since 1856 five thousand cases annually, we have had a good opportunity of testing different instruments. The cephalotribe I have entirely abandoned, after a long and faithful trial of it under its various modifications.

Introducing the trepan, I pass it into the cranium through the occipital bone, and, applying the cranioclast, the head is extracted without difficulty.

In these cases I always prefer turning before performing craniotomy, because, when the operation is performed while the head is presenting, the movements of the child in the agonies of death can be very distinctly felt, and it may, and often does, live after being extracted. Turning, however, is not to be readily accomplished in these cases without good assistance; and had I not here the co-operation of experienced hands I would not have attempted it. It may be performed after perforation without risk of injury to the soft parts of the mother.

There has been here no rupture of the cervix, no laceration of the tissues, and no metritis, and we are justifiable in hoping for a rapid recovery. This woman should be placed in a large, well-ventilated, and quiet room, where she will be exposed to no danger of infection from patients suffering from metritis, peritonitis, etc., and in eight or ten days will be rapidly convalescing.

If she should again be pregnant in the future, she should be examined every month during the second half of the pregnancy, and when the child has attained a weight of four or five pounds, or about the thirty-fourth or thirty-sixth week, premature labor should be induced.

Nov. 14.—Patient doing well.

G. WILDS LINN.

RELATION BETWEEN RACHITIS AND SYPHILIS (*The American Practitioner*, February, 1875).—Dr. R. W. Taylor, after considering the relation between these two diseases, says that he is prepared to admit that syphilis may be one of the causes of rickets, but that there is no specific relation between the two diseases; that syphilis may remotely cause rickets by its lowering effects upon the organism, in the same manner that any adynamic influence might produce the same effect.

TRANSLATIONS.

TANNIN IN THE CORYZA OF ADULTS AND CHILDREN.—"You are constantly telling us," it is sometimes said, "of the great progress made in recent times by medicine, and you have not yet found out, from the time of Hippocrates until now, the means of curing coryza." Those who reproach us in this way forget to add that, not wishing, for the sake of curing a simple "cold in the head," to submit to any of the hygienic measures rationally indicated, they demand in reality a prompt means of cure, easy to follow, even while travelling. Even those who cry up infallible specifics most loudly have never proposed anything more than some palliative, and these, from ammonia to iodine, are always in a liquid form, just the shape which is most difficult and inconvenient to carry about. In general, all these preparations are far from compensating by their utility for the inconvenience of their employment.

For ourselves, who do not intend to change our habits or suspend our business any longer for the sake of a coryza, every time we have been attacked by our enemy we have put the question upon a practical footing, and have endeavored no longer to cause the disease to disappear instantaneously by some sovereign *specific*, but to diminish its principal inconveniences and to render its attacks in some degree tolerable.

Observe how we have attained our object. The first symptoms of coryza are congestion of the mucous membrane of the nasal fossæ, with dull headache, heat in the upper part of the face, sleepiness, dryness of the mouth and throat, more noticeable when swelling of the mucous membrane closes the nasal passages completely, obliging the patient to breathe with the mouth constantly open. Such are the principal tortures of a "cold in the head," and for which relief is most urgently demanded. It is evident that if an energetic contraction of the mucous membrane can be brought about, so that its volume shall be diminished, this desideratum can be attained. In short, when the air finds a free passage through the nasal fossæ, the frontal headache and the lachrymation will disappear, and at the same time the dryness of the mouth, which may then be kept closed.

In addition, the mucous membrane being compressed like a sponge, makes easy the expulsion of those fluid mucosities which cannot be detached under ordinary circumstances without great effort.

We may obtain these results constantly by the use of tannin made into a powder after the following formula:

℞ Tannin., gr. ½;
Pulv. iris,
Pulv. althææ, āā gr. xv;
Tinct. vanillæ, gtt. iv.—M.

To be taken in small pinches three or four times a day, or oftener if necessary.

Coryza, which in the adult merely presents inconveniences easy to support, becomes, on the other hand, a serious matter when it attacks an infant. Here, as all physicians know, the occlusion of the nasal fossæ may directly threaten life, because rendering efforts at suction of the breast impossible. It is necessary to act immediately; and it must be confessed that the means heretofore recommended have proved totally inefficacious. Observe our method of combating the danger.

After having prepared the following ointment,

℞ Tannin., gr. ½;
Axungiæ, ʒi ℈i;
Tinct. vanillæ, gtt. v.—M.

we roll between the thumb and index-finger a very small square of paper so as to form a not very rigid

cylinder, which will yield easily to any lateral movements which may be made by the infant while it is being introduced into the nostrils. Then, after having smeared the exterior with the ointment, it is introduced deeply into each nasal fossa.

In this manner we often bring about one or two very salutary attacks of sneezing, and always the effect just noticed as occurring in the adult, that is to say, free circulation of air in the nasal fossæ following the subsidence of swelling in the mucous membrane. The parents are always struck with the rapidity with which the infant returns to the breast, thanks to the success of this little manœuvre. It is because we are convinced that we have rescued more than one infant from imminent danger that we lay stress upon the process which has demonstrated to us that, in the medical treatment of infancy, it is the trifling appliances which often produce the best effects.—Dr. D., in *Tribune Médicale*, Jan. 17, 1875. X.

THERAPEUTIC NOTES.

Massage in Abscess of the Cornea.—In the *Independencia Médica*, of Barcelona, Dr. Osio recommends the application of massage in abscess of the cornea. He says that every one unconsciously practises it when rubbing the eyes. At the Ophthalmological Congress of 1872, held in London, Donders called attention to the practice as one that had yielded him excellent results. Dr. Osio has employed massage of the cornea with success in certain diseases of the eye. He has more recently combined the use of aqueous vapor with massage. He employs the following method: An apparatus charged with an infusion of chamomile is placed before the patient's eyes (which have previously been covered with a double layer of fine muslin) at such a distance that the vapor reaches the eyes at a temperature of from 90° to 100° F. At the same time massage of the eye should be performed with the fingers over the muslin, rubbing it up and down, from side to side, and finally by a circular movement pressing upon the centre of the cornea. At intervals the apparatus may be brought nearer, so that the eyes may for a few moments be subjected to steam of a higher temperature than that indicated. This vapor-bath should be continued for a half or three-quarters of an hour, and during this time the massage should be repeated from eight to ten times, with a duration of from one to two minutes upon each occasion.

Massage in Sprains.—M. Fontaine writes (*Archives Méd. Belges*, iii., 1874) on the use of massage in sprains. He has himself had great success. M. Fontaine first covers the limb with oil, and the part is rubbed with one or both thumbs, in gentle movements, from the extremities upwards, following, in general, the direction of the muscles and tendons. The affected, painful spot is rubbed gently, but the healthy neighboring parts more energetically, and the muscles at times thoroughly kneaded. This manipulation lasts from a quarter to half an hour, and is repeated three times daily. In the interval the limb is raised and bandaged. M. Fontaine thinks that the massage acts by spreading the blood extravasated (through rupture of vessels) over a large surface, and thus promoting absorption. But, whatever may be the *modus operandi*, M. Fontaine has obtained good results in sprains by the application of massage.

According to *The Doctor*, February 1, a death has occurred in France from the intravenous injection of chloral.

Chloral as an Application in Gangrene.—M. Dujardin-Beaumetz communicated to the Société des Hôpitaux, at a recent sitting, an account of the case of a young man eighteen years of age, who applied for relief for spontaneous gangrene affecting the hand and fore-arm. In order to dissipate the odor, and to avoid the danger of septicæmia as far as possible, M. Beaumetz had the affected limb kept constantly in a bath containing one part chloral to five hundred parts water. At the end of eight days the arm was amputated, with a favorable result.—*Medical Press and Circular.*

Antidote for Phenic Acid.—The editor of the *Pabellon Médico* strongly commends M. Husemann's procedure in regard of employing the alkalies and alkaline earths, and more especially the saccharate of lime. This is readily prepared by adding five parts of caustic lime to a solution of ten parts of sugar in forty of distilled water, and leaving it to digest ten days before filtering.—*The Doctor.*

Typhoid Fever.—M. Valette read before the Société de Médecine a *résumé* of twenty-one cases of fever treated by Brandt's method of cold immersion. All the cases did well. Among the rest was a child of eleven, in whom typhoid fever had supervened on whooping-cough. The whooping-cough disappeared, but returned during convalescence.—*The Doctor*, from *Lyon Médical.*

Local Anæsthesia in Cases of Labor.—Dr. Friedländer relates (in *Deutsche Klinik*, No. 30, 1874) that, being called to a woman who was suffering intolerable pain in the sacral region, he resorted to an application of chloroform (one part) and ether (two parts), after having vainly tried several other means. He obtained by this means total cessation of all pain until perfect delivery. After having successfully tried the same application in a great many cases, he recommends its employment as an anodyne for the pains of parturition.

In Rachitis.—

℞ Calcis phosphatis, ʒi;
Sodii carbonatis, ʒii;
Sacch. lactis, ʒiii.—M.

Two or three pinches of this with the child's food three times a day, combined with cod-liver oil, saline baths, frictions, etc.

Alkaline Chloro-Albuminate of Mercury for Hypodermic Use.—

No. 1.

℞ Hydrarg. chlor. corros., ʒvj ℈ij;
Ammon. chlorid., ʒiv;
Sodii chlorid., ʒi;
Aquæ destillat., ʒiv.

Dissolve and filter.

No. 2.

Dissolve the white of an egg in 4 oz. distilled water; filter.

Mix the two solutions, and filter; ♏xii contain about $\frac{1}{16}$ gr. of the mercurial salt.

A New Poultice.—Carrageen is recommended by a committee of the French Academy as a substitute for flaxseed meal in poultices. It should be cut into thin plates of the size required, and when steeped in hot water it softens and swells in a few minutes. This new poultice has been tried by MM. Demarquay, Gosselin, and Verneuil in their respective hospitals, and they have pronounced it to be far superior to the linseed poultice; it keeps moist for more than sixteen or eighteen hours; it does not slip; is inodorous, does not readily ferment, nor does it soil the linen or bed of the patient.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

PUBLISHED EVERY SATURDAY BY
J. B. LIPPINCOTT & CO.,
715 and 717 Market St., Philadelphia, and 25 Bond St., New York.

SATURDAY, FEBRUARY 20, 1875.

EDITORIAL.

THE AMERICAN MEDICAL ASSOCIATION.

WE desire to call attention to a letter in another column, which, from its intrinsic character, as well as from the high position of its author, and his knowledge of the important subject on which he writes, deserves a most careful consideration. We were somewhat surprised at the statement that the *Philadelphia Medical Times* had pronounced the last meeting of the American Medical Association a failure, as we were not aware of having used language warranting such a deduction. On consulting our file, the strongest expression we can find is, "We deny emphatically that the convocation was in any true sense representative of the American medical profession." We are under obligations to Prof. Gross for confirming this, for surely no one will claim that a body in which there were "very few delegates from the Eastern, Middle, or Northern States" represented the whole country. The meeting did, in truth, represent a *section* of the country, and failed therefore in being *national.* If, in the play of Hamlet, Hamlet be not on the stage, can Othello, Juliet, Romeo, King Lear, one or all, atone for the omission, behave they themselves never so nobly? It makes little difference whether five hundred or five thousand physicians were present, if they were all or nearly all from one portion of the country. We are also obliged to Prof. Gross for confirming our expressions as to one of the great causes of this absence of national character: namely, the want of a central place of meeting.

There is a hyperæsthesia to criticism which may be the outgrowth of a sense of weakness or failure, and may be dependent upon the sufferers not being veterans in discussion. To the existence of such hyperæsthesia we attribute the feeling which, according to the personal statements of an ex-president of the Association, has gone abroad, that the *Philadelphia Medical Times* is hostile to the American Medical Association, although we have over and over again given in our adherence to it. We are not able to express ourselves more clearly than we did last spring (vol. iv. p. 555), when we wrote, "We are of those who believe in the necessity of some *central* organization which shall, so far as possible, represent the profession in the United States, and we intend, therefore, to uphold the American Medical Association as much as we are able." He is a very frisky logician who reasons that a journal is opposed to an institution because it criticises its management.

We believe that, in order for the American Medical Association to be *national* in its character, great care should be exercised in selecting its places of meeting, and that in order for it to be *respected* at home and abroad it should not yearly publish a mass of matter most of which any respectable editor would at a glance consign to the waste-paper basket.

We are as proud of our country and of its achievements as is any one, but have never felt that we were to be elevated either in our own respect or in that of our transatlantic friends by proclaiming this pride. Boys and young nations are very apt to brag of their achievements. We do not see why it is more necessary for us to wave the starry banner and shout hosannas over the American people than it is for the London *Lancet* or the *British Medical Journal* to act as showman to the British Lion. We had thought that at least our learned professions had outgrown this weakness.

The American Medical Association, as well as the American profession, is to be advanced not by studying its excellencies, but by trying to determine and remedy its defects, and he who points these out is a far better friend than he who smothers progress with overflowing praise. One of the reasons the British Association is so much more successful than ours, seems to us to be because it does not waste its funds in publishing volumes that are a byword of contempt with critics both public and private.

We are by no means through with this subject; but, as the space allotted for editorial is full, we

shall next week offer in all humility to the consideration of the leaders of the American Medical Association a few suggestions as to the causes of that want of success in sustaining a thoroughly national society which, according to the statements of Prof. Gross, seems recently to have attended their efforts.

LEADING ARTICLES.

THE USE OF COLD IN FEVER.

NO. II.

THE clinical evidence in regard to the use of cold in fever may be looked at in two different ways. Thus, we may consider the assertions and results of individual observers, who have seen large numbers of cases of fever and used the method faithfully, or we may weigh the sum total of the experience of all who have written upon the subject. At first sight it may appear that the latter is by far the best course to pursue; but it must be borne in mind that the treatment is one opposed to the ordinary medical prejudices, that its efficient carrying out involves so much labor and attention as to be almost impossible to those who disbelieve in its usefulness, and that those physicians who claim most for the method affirm most strongly that to do much good it must be practised very vigorously and steadily.

These things being so, it seems wisest to look at the evidence from both points of view.

M. Franz Glénard affirms (*Glasgow Medical Journal*, 1874) that there have been from six thousand to eight thousand cases of typhoid fever treated by the use of cold in Austria, Prussia, and Russia, with an average mortality of from 4.5 to 7.6 per cent.; the previous mortality, under the old expectant method, having varied from 18 to 25 per cent. If these figures are correct, they are decisive. Where he gets them from, however, I do not know. All the evidence that I have met with is summarized in the following table. Unfortunately, it is not always easy to decide whether a German is writing about typhus or typhoid fever; but where it is not mentioned the probabilities are that the cases are in great part, if not wholly, enteric fever:

Table showing the Results of the Cold-Water Treatment in Typhus and Typhoid Fever.

NAME OF REPORTER.	PLACE.	NUMBER OF CASES.	MORTALITY, PER CENT.	REMARKS.
Jürgensen.	Kiel.	160	3.1	Previously 15.4 per cent. Typhoid fever.
Petri.	Laubbach.	31	3.2	
Liebermeister.	Basel.	1121	8.2	Previously 26 to 30 per cent. Treatment very rigorous. Typhoid fever.
Mosler.	Greifswald.	71	7	
Mosler.	Greifswald.	92	9	Typhus exanthematicus, previously 50 (?) per cent.
Becher.	Ostpreussen.	17	24	Typhus exanthematicus, previously, on an average, 10 per cent.
Brandt.	Stettin.	187	2.1	Private practice.
"	"	84	10	Military Hospital. Previously 30 per cent.
Goden.	"	24	20.8	
Stohr.	Würzburg.	120	6.6	Previously over 20 per cent.
Drasche.	Vienna.	40	10	Year before 16.5 per cent.
Ziemssen.	Erlangen.	32	9.4	Formerly, with bad cases, 30.2 per cent.
Stieler.	Munich.	226	5.6	Formerly 12.15 per cent.
Pastau.	Breslau.	246	11.8	Typhus exanthematicus. Without baths, mortality 16.5 per cent.
Popper.	Prague.	20	5	
Riegel.	Würzburg.	156	4.4	Only serious cases included. Almost every fatal case came in too late for baths to do good.
Götz.	Prague.	54	5.5	Typhoid fever. Other cases treated at the same time, expectantly, 15.4 per cent.
"	"	50	18.8	Typhus exanthematicus.
Scholz.	Bremen.	125	4	Typhoid fever.
Wunderlich.	Leipsic.	155	7	Typhoid fever. Previously 18.1 per cent. out of 1178 cases.
Zaubzer.	Munich.	356	5.6	Typhoid fever. Previously 17.6 per cent. out of 701 cases.
Bauer.	"	87	7	Typhoid fever. Previously 11½ to 16 per cent.
Duchek.	Vienna.	60	28.3	According to Brandt, this high mortality depended upon the treatment having been imperfectly performed.
Krofft-Ebing.	Rastatt.	105	25.7	Only bad cases. Previous mortality 34 per cent.
Wille.	Rheinau.	59	19	
Stecher.	Claye.	146	8.2	
Schönheiden.	Dammartin.	82	3.6	Mild epidemic.
Pfeifer.	Weimar.	58	5.2	
Leube.	Ulm.	47	19	Typhoid fever, among French prisoners of war. Baths of moderate temperature used.
Böhm.	Niederbronn	131	11.5	Typhoid fever. Military hospital.
Gersauer.	Vigy.	97	6.18	Typhoid fever. Mortality on expectant treatment 23.91 per cent.
Drasche.	Vienna.	55	19	Typhus.
Merkel.	Nuremberg.	41	2.2	Typhus fever.
Loebel.	Vienna.	87	18.4	Typhoid fever.
"	"	105	28.6	Typhus fever. The treatment in this and in the preceding case was not thoroughly carried out; the patients mostly receiving only three baths a day.
Glénard.	Lyons.	52	0	Typhoid fever.
Schmidt.	Erlangen.	56	0.18	Several fatal cases not counted, because not received until the fifteenth day, and, therefore, too late to test the treatment; they bring the total mortality to 4.14 per cent.
Heubner.	Leipsic.	72	0.14	
Binz.	Versailles.	190	2.1	Soldiers. Mostly, if not all, typhoid fever.
Zeroni.	Mannheim.	72	18	Soldiers.
Valette.	Lyons.	21	0	Typhoid fever.

This table is of such a character that any lengthy discussion of it seems unnecessary. It is, however, allowable to call attention to the facts that the failure of the method at Vienna is, by the upholders of it, very

justly attributed to the inefficient carrying out of it, and that in some other instances the apparent high mortality is due to none but the most serious cases being included, or to the patients having been soldiers, worn out by the hardships and toils of a severe campaign.

When the evidence furnished by single observers is noted, the results are even more astonishing than that of the above table; so that although the aphorism of Brandt, as quoted and endorsed by Glénard,—"every enteric patient regularly treated from the commencement by cold water will be free from complications, and will recover,"—can scarcely be accepted, yet the great merit of the method cannot be gainsaid.

Prof. Liebermeister has employed the cold-water treatment on a larger scale than has any other individual. At the hospital at Basel, up to the year 1865, 1718 cases of typhoid fever were treated upon the expectant plan, with a mortality of 27.3 per cent. In 1865, Dr. Liebermeister introduced the use of cold bathing in a timid, inefficient manner, and reduced the mortality, in 982 patients treated, to 16.2 per cent. In 1866 he commenced the vigorous regular employment of the method, and reduced the death-rate, in 1121 patients treated, to 8.2 per cent. Prof. Liebermeister himself criticises very closely, in the recent Encyclopedia of Medicine, these statistics, and raises the mortality, by excluding trifling cases, to from 10 to 11 per cent.; but, after the anti-pyretic treatment has been even unjustly dealt with, the statistics still show that the mortality under the cold-water treatment is not half what it formerly was. Further, a certain proportion of cases are always admitted to the hospital moribund, too late for any human agency to be of avail: these cases, of course, maintain the same proportion under any treatment; they really constitute a large part of the deaths seen in the cold-water treatment, so that if they were eliminated from both sides the death-rate "under the anti-pyretic plan would be but a small fraction of what it would be under the other."

In hospital practice the patients are very rarely received upon the first day of the attack, and very frequently do not enter the wards until the third week, so that the statistics which are included in the above table, or those given by Prof. Liebermeister, favorable as they are to the new treatment, only express a portion of the truth. If the good effected be so great when the remedy is often not applied until the second or third week, much more is to be expected when it is employed faithfully from the moment the temperature becomes elevated.

Accordingly, Brandt is said to claim that if the case be properly treated, from the onset of typhoid fever, death will never occur; and it is stated (London *Lancet*, January 23, 1875) that out of 259 cases he has had 259 recoveries. I have not had access to the original papers of Dr. Brandt, and cannot, therefore, analyze his statistics; but Glénard (*loc. cit.*) is just as enthusiastic; he states, "You will not find in the five or six thousand cases of typhoid fever treated by this method one single unsuccess among those which have been submitted to it since the beginning of the disease."

It is not necessary to endorse this statement as absolutely true in order to accept the proposition that the extreme value of systematic cold bathing in typhoid and typhus fever has been so abundantly demonstrated that no excuse remains for the further neglect by physicians of this most important measure. The immediate effects of the bath upon the symptoms of the disease and upon its duration will be considered in the next article. H. C. W.

CORRESPONDENCE.

Leipsic, January 16, 1875.

To the Editor of the Philadelphia Medical Times:

DEAR SIR,—Last evening, January 15, Dr. Angelo Mosso, of Turin, delivered an address before the Physiological Society here, upon "A New Method for Measuring the Alterations in the Dimensions of Blood-vessels in the Living Man;" an abstract of which I send you, as I am sure that the attention and interest of many of your readers will be excited by it.

Dr. Mosso was last year occupied in observing the alterations in the size of certain organs, such as the kidney, which take place when, after their removal from the body, an artificial circulation is brought about in them. To this end he made use of a vessel with three tubulatures. In this the organ under examination was placed, and while two of the apertures allowed the ingress and escape of the circulating fluid, in the third was inserted an upright tube which would show the expansion and contraction of the organ through the medium of oil or water, with which the vessel was filled, and which rose or fell in the perpendicular tube.

This method of marking the expansion was attended by the drawback, that an increase in the height of the column in the tube exerted a perceptible pressure upon the expanding organ; and to avoid this he constructed an apparatus which he has since been able, with remarkable success, to turn to advantage in his investigations and experiments upon the living man.

This apparatus, which Dr. Mosso has named plethysmograph, consists of two distinct portions: one, by means of which the change in volume of the extremity under examination can be transformed into a measurable motion; the other, serving to record this motion without in any way influencing the pressure upon the surface of such extremity.

The first is a tin vessel large enough to receive the fore-arm comfortably (it can, of course, be made of a proper size for leg or thigh), armed with two tubulatures and closed near the elbow by an india-rubber ring, which effectually prevents the escape of the water with which it is to be filled. One of the tubulatures is at the end, and is connected with a flexible tube which runs to the graphic portion of the apparatus, and the other, on the upper side, is used to fill the case completely with water. In it a thermometer is usually inserted through the cork which closes the case completely. The tube

from the distal end is conducted, as nearly level as possible, to what may be termed a glass bucket, which hangs exactly counterpoised in a mixture of alcohol and water, from a ribbon running over a pulley. To the other end of the ribbon is attached the pen which is to trace the expected curve upon a rotating drum.

The arm having been introduced, and its owner placed in a comfortable sitting position, the case is completely filled with water, as is also the tube which runs from it. Enough water is also in the bucket to cover the end of this tube.

If now the volume of the enclosed extremity increases from any cause, water is pressed out of the case through the tube into the bucket, which becomes heavier and descends, thereby causing a motion of the pen in an upward direction. If, on the other hand, the volume of the extremity diminishes, then the water in the bucket is driven back to the case by atmospheric pressure, and, the bucket itself rising, a motion in the opposite direction is communicated to the pen.

The various difficulties which arose in the path of the inventor of this apparatus, not the least of which were the fact that the bucket underwent a progressive loss of weight as it descended into the fluid under it, and the necessity of providing against an overflow from the necessarily small bucket in case the extremity expanded very much, have been most ingeniously surmounted, and the apparatus as exhibited last night before the Society worked admirably, as it has done during other experiments which I have witnessed.

Besides exhibiting his apparatus, from my necessarily imperfect description of which I trust some idea may be gained, Dr. Mosso showed a number of tracings taken under different circumstances, and from these and his remarks it seemed plain that he had devised a means for studying the increase in volume of the blood-vessels of the extremities, and, through observations upon these, of gaining information with regard to the condition of the blood-vessels of the brain,—information of value not only from a physiological stand-point, but also in the solution of some questions in experimental pharmacology, and perhaps in clinical medicine. In passing, it is worth while mentioning that Prof. Wunderlich, who was present last evening, has already taken steps towards some investigations with the instrument in the hospital.

The tracing obtained from a man who sits perfectly quiet, and with his mind in as placid a condition as possible, is, so to speak, a straight line, varied at regular intervals by the respiration, and at irregular intervals by certain unexplained and small changes of volume which are not coincident in both arms. The latter are termed "spontaneous" movements, and both are readily allowed for in observing the curves, as they present distinctive appearances.*

When, now, the apparatus is in working order, the blood-vessels are observed to change their volume in the most remarkable and hitherto unsuspected manner. Volatile substances, as ammonia, held under the nose for a moment, as well as touching the other hand with a piece of ice, caused a decided alteration in the amount of water in the case. In each instance the volume of the arm decreased. Besides these phenomena which were shown, Dr. Mosso showed the tracings and described some of the phenomena which showed themselves when the subject of the experiments was Dr. Pagliani, a friend who on several occasions submitted himself to what must certainly be a somewhat wearisome process.

In Pagliani's case, a cup of coffee was sufficient to cause a decided contraction of the blood-vessels of the arm, which lasted for three-quarters of an hour, while, on the other hand, on one occasion, while he slept the arm increased very greatly in volume, and the "spontaneous movements" were much greater.

During this sleep, the barking of a dog, the striking of the clock, and a slight touch upon the cheek, caused a temporary, but not complete, reduction of volume. On waking, Pagliani remembered nothing of the sounds or the touch. Before his waking the vessels again contracted, and when he was fully conscious they had resumed their original condition. The speaker drew from this and another similar experiment the conclusion that consciousness is only possible when the blood-vessels contract strongly, and the blood streams from the periphery to the centre.

On one occasion, when Dr. Pagliani was perfectly quiescent, the sudden though quiet entrance of Prof. Ludwig caused a most marked contraction of the blood-vessels of the arm; and indeed when Mosso himself or others of the students in the Physiological Institute were the subjects of experiment, this same contraction took place, showing, as the lecturer said, when one considers the close and friendly, one might almost venture to say familiar, relation in which Prof. Ludwig stands to his pupils (thereby eliminating alarm or uneasiness from the question), with what veneration and respect he was regarded by them, as in silence their very blood-vessels drew together to do him honor.

Invariably it has been found that the slightest mental effort is accompanied by a reduction in the volume of the arm; a comparatively simple sum in multiplication producing a very marked effect.

In connection with this point, Dr. Mosso related a story of his experience in Turin with a friend of a literary turn and a good classical scholar. The latter entered his room while he was occupied over his apparatus, and asked of what possible use such an affair could be. "It will tell whether you are as well up in Greek as in Latin," replied Mosso, and thereupon, copying off a page of Latin and one of Greek, he put his unfortunate friend into the machine, and asked him to read both pages. The Latin came first, and the arm-volume remained stationary; but when the Greek was begun there was a sudden and great alteration, the arm-volume diminishing.

As may be imagined, the address was exceedingly interesting; and it is a matter for congratulation that

* The pulse also makes a slight impression.

Dr. Mosso is still prosecuting his investigations, which it is to be hoped will finally see light in an extended and complete form. I should not omit to say that the alterations caused by muscular contraction are only avoided through the intelligence of those upon whom the experiments are made; but it is quite safe to "stigmatize" those who have been the subjects here, as Helmholtz did his friends, as persons of perhaps more than ordinary intelligence; besides, the alterations of volume from muscular movements can be readily recognized, and the experiment repeated or allowance made for the error.

Dr. Mosso's address was attentively listened to, and warmly received. He mentioned many experiments with various drugs; among others, one with nitrite of amyl, when there was a slow but perceptible contraction[?] of the vessels. This, however, and other similar observations, he will be able, he trusts, to work up more fully later. In this hope he is supported by those whom he yesterday addressed, all of whom seemed convinced that the new plethysmograph will be found a valuable aid to scientific research, especially in the hands of so careful an investigator as its inventor.

H. B. HARE.

AMERICAN MEDICAL ASSOCIATION.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

THE object of this communication is to call attention to the American Medical Association, whose twenty-sixth annual meeting will take place at Louisville, Kentucky, on the first Tuesday of May next. Instituted in 1847, through the influence and exertion mainly of one man,—Prof. Davis, then of Binghamton, and now of Chicago,—the Association has had, if not a brilliant career, certainly a very satisfactory one, despite the numerous attempts, private and public, which have been made from time to time to disparage and dishonor it. I express this conviction without the slightest fear of successful contradiction; for I profess to have some knowledge of its history, of its proceedings and transactions, and of the men who have been connected with it, either as members or officers. Of the latter there is a long list of names of which any medical association might well be proud; men who have illustrated their profession by their labors and writings, and have added lustre to their age and country. The meetings have been, for the most part, well attended. During its session in this city in 1872, nearly eight hundred delegates were present; and last June, at Detroit, there were upwards of five hundred, and it is perfectly certain that if a more central point had been selected, the number would have been much larger. As it was, there were very few delegates from the Eastern, Middle, and Northern States. Nevertheless, the meeting was a highly respectable one, not only in relation to members but also in regard to talent, learning, and scientific attainments. What more especially impressed me was the great number of elderly, gray-headed men present on the occasion, men who had come from great distances to take an active part in the proceedings of the Association and to show their interest in its welfare and prosperity. Another circumstance which could not fail to strike every spectator was the decorum which characterized the proceedings of the meeting. The sections accomplished a great deal of work, and the discussions in most, if not all of them, were animated and interesting. As respects the social aspect of the meeting, nothing could have been more gratifying. The citizens of Detroit literally vied with one another to make the occasion one of high social enjoyment. Their hospitality was absolutely unbounded, and will long be remembered by every member of the Association.

In the face of all these facts, I was not a little surprised last summer when I saw an editorial statement in the *Times* that the meeting had been a failure, inasmuch as, it was alleged, it did not represent the American medical profession, owing to the absence of many of its best and most distinguished members. This, it seems to me, is begging the question. No rational person would expect that all the most prominent members of the profession would attend every meeting. Philadelphia, Baltimore, New York, and Boston, for example, were all poorly represented. Many of the great lights in all those cities were absent; and you, yourself, remained away, snugly ensconced behind your editorial tripod, or, it may be, engaged upon some experiment intended to elucidate some obscure point in the physiology of the nervous system, or the action of some article of the materia medica. Why the meeting at Detroit should be denounced because of the absence of those lights passes understanding. Did those men remain away because they felt indifferent respecting the success of the meeting? Was it because they dreaded a journey of six, seven, or eight hundred miles in the heat and dust of summer? Finally, was it because the physicians of the Eastern, Northern, and Middle States supposed they might lose some of their effulgence by contact with the Western and Southwestern members of the profession? Whatever the cause may have been, it reflects no credit upon those sections of the country that they permitted their representative men—*those great lights* of the profession, as you regard them—to remain at home, while their more humble but more active and industrious brethren of the great West were zealously laboring and spending their time and money in upholding an Association which, to say the least of it, has done more in harmonizing, unifying, and socializing the medical profession of this country than all the medical societies, great and small, civic and rural, that have ever been formed on this continent. Taking this view of the subject,—and no unprejudiced man acquainted with it can look upon it in any other light,—is it not our solemn duty to sustain the Association, instead of decrying and undermining it by insinuations of failure, if not actual abuse for any of its short-comings? The old adage, "Give a dog a bad name and you might as well hang him," has a powerful significance here. Some men—certain editors in particular—think it their duty to disparage everything Ameri-

can, and they consider themselves supernally happy if in instituting comparisons between the physicians and institutions of this and other countries, they can push us into the gutter. With such growlers I have no sympathy; and in saying this it is far from my wish to be understood as being blind to our manifold sins of omission and commission. No man, perhaps, feels more sensitive upon this subject than I do. As a teacher for forty years in prominent medical schools, and as a man who has seen much of his profession, I am free to confess that we have much to be ashamed of; and yet, despite this averment, I experience a sincere pride when I reflect that I am an American physician and surgeon; for I ask myself the question, What country on the face of the earth has ever done so much in so short a time in developing its medical profession as my own? What nation has ever produced so many great physicians, surgeons, obstetricians, teachers, authors, and scientists as ours, and in so brief a period?

These reflections bring me back once more to the special object of this communication. The American Medical Association has existed as an active body for a quarter of a century, and now numbers nearly five thousand members, including many of the most distinguished and earnest workers in the profession. Its next meeting is to take place at Louisville, Kentucky, a State which has produced McDowell, the father of ovariotomy; Dudley, the great lithotomist; Short, the learned botanist; Miller, the able obstetrician; and a host of excellent teachers and practitioners equal to any similar number of men in the country. A residence of sixteen years in Kentucky, and an extensive acquaintance with its citizens, afford me the assurance that the Association will meet with a most cordial welcome at Louisville; and to make the meeting a success, or, in other words, what it should be, it is only necessary that the great lights of the profession who absented themselves from the meeting at Detroit should turn out in full force next May. I appeal to the common sense of the profession whether this would not be a much wiser and better plan than to indulge in disparaging remarks, not only in bad taste, nay, let me say, the worst possible taste, but calculated, when seen abroad, to lower us in the estimation of our European brethren, and to humble our national pride.

At the meeting in this city, two years ago, I offered a resolution looking to a radical change in the character of some of our proceedings. I refer to the substitution of addresses in medicine, surgery, and obstetrics for the meaningless reports upon these topics to which the Association was annually obliged to listen, at the expense of much of its time and the annoyance of its patience. At the meeting at St. Louis in 1873, the plan suggested in the resolution was substantially adopted; and yet the address in medicine delivered at Detroit last June was simply a report of the contributions made to our periodical literature the year previously; or, in other words, a summary of some of the leading practical facts developed during the last twelve months. All this would be well enough, if we had not several medical journals the avowed object of which is to furnish the reader with just such matter. What the Association needs is elaborate, learned, and well-digested addresses in each of these branches of medicine, upon any subject the writer may select, using every effort to make this discourse at once attractive, fresh, and truly instructive. The rule provides that the reading of each paper shall not exceed forty minutes. This is simply absurd, and, therefore, the sooner it is abolished the better.

Much abuse has been heaped upon the Transactions of the Association, of which twenty-five portly volumes have now been issued. That these volumes contain a good deal of rubbish is unquestionable; but it is equally true that they comprise many papers of great value, abounding in excellent material and in finished scholarship. The British Medical Association, now in the forty-third year of its existence, has no such record; and, judging from what I witnessed at two of its meetings, I am bound to declare that our proceedings compare most favorably with those of that famous institution.

I have the honor to be, very respectfully, yours,

S. D. GROSS.

PHILADELPHIA, February 1, 1875.

PROCEEDINGS OF SOCIETIES.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, FEBRUARY 4, 1875.

THE subject for the evening was pneumonia, its etiology, treatment, etc., and Dr. AUSTIN FLINT was called upon to open the discussion. He said he was not prepared to enter upon an elaborate discussion of the subject assigned him, but would simply indicate some of the points of inquiry that suggested themselves to his mind.

First, he would refer to the diversities which disease presented at different times and places. Our medical progenitors attached more importance to this aspect of disease than we do at the present day. Perhaps the present tendency to accept nothing that cannot be accounted for or explained may have an influence. The disease under consideration this evening, for example, presents great diversity. Pneumonia is a disease which, ordinarily, is attended with no danger to life, yet at certain times and places it assumes a character which renders it one of the most fatal of affections. So in regard to scarlet fever and other diseases.

In the second place, the complications of disease, we find, with our present knowledge, great difficulty in explaining. Whether they are due to differences in degree of the initiatory cause, or to differences in regard to the susceptibility of the system, we cannot easily determine.

Does pneumonia at the present time, as it prevails in this city, present any unusual complications? He, in connection with this inquiry, gave a brief account of three cases which came under his observation within the past month. The first case is that of a young man, aged 30, whom he saw with Dr. Caro on June 18. A few days prior to this date, he was attacked with great pain in side, with high febrile movement, but the doctor could not make out any of the physical signs of pneumonia. Dr. Flint was also unable to discover any of the physical signs of pneumonia at the first consultation. He saw this patient again January 20, and at that

time the lower lobe of the right lung presented well-marked crepitant râles, the febrile movement high, but less than it had been a few days before. On the 21st, he was delirious, but there were no signs of pericarditis. He did not see this patient after this date. He was seen by Prof. Clark. Death took place January 23. The next case was that of a young man, aged 30, of good habits, whom he saw with Dr. Keyes, January 31. The patient presented the signs of pneumonia, with partial solidification of the lower lobe of the right lung. He had high febrile movement, but there was nothing in the case to denote any immediate danger. He met Dr. Keyes a few days afterwards, who said the patient was doing well. On the 25th, he received a note from Dr. K., stating that this patient became violently delirious and died before morning.

The third case was in the person of a woman, 68 years of age, who was seen January 31. She had been attacked three or four days before, and had solidification of the lower lobe of the right lung, and some signs of the same at a point in lower lobe of left lung; the pulse and temperature were not inconsistent with a mild form of pneumonia. This patient died during the night.

Without stopping to follow up the inquiries which these cases suggest, Dr. Flint passed on to the consideration of the different forms of treatment of pneumonia. Statistics do not give very satisfactory results in regard to the advantages or disadvantages of bleeding. He has regarded opium as an important measure of treatment, especially in cases characterized by vigilance, restlessness, and perhaps delirium.

Dr. Wm. H. Thomson made some remarks with reference to the use of cold in the treatment of pneumonia, and read the following report of cases in his charge in Bellevue Hospital during the past month:

Case I.—W. F., native of Germany, aged 40, upholsterer; mother died of phthisis, otherwise family history good; is a moderate drinker, but not often drunk; has had rheumatism and diphtheria; never had malaria.

Nine days before admission, while working out of doors and perspiring, and subsequently becoming chilled, was seized with chill and rigor, and had pains all through his body. Had another chill six days before admission, with acute pain in his right side, under nipple.

January 8.—On admission, patient has high febrile movement; pulse 105; respiration 32; temperature 103¼°; surface of body hot and dry; tongue coated yellowish; lips parched, great thirst; marked dulness over right lung, below spine of scapula; broncho-vesicular breathing at upper part; crepitant râles. Ordered ammon. carb., gr. x, quin. sulph., gr. ii, every two hours. Also two pounds of ice in bag to chest.

January 9, 2 A.M.—Temperature 100°; ice removed. 5 P.M.—Pulse 98; respiration 28; temperature 102¾°. Ordered ice to chest, and treatment continued. 9 P.M.—Temperature 100°; ice removed; feels easy and inclined to sleep.

January 10, 10 A.M.—Patient passed a good night, and is feeling comfortable this morning. Temperature 99°; surface of body warm and moist; bowels confined; but little pain in side; less sputa. Ordered pil. cath. co. No. 3; the same treatment continued, excepting the ice.

January 11.—Patient feels very well. Temperature 99°; respiration but little accelerated; pulse regular and of good volume. Resolution progressing. From this date patient rapidly improved, and was discharged, cured, on the 18th.

Case II.—D. C., aged 32, Ireland, laborer; general health good, temperate. One week before admission, while selling books on street-cars, was seized with chill and rigor, with pain in left side, compelling him to cry out. He went home and took to his bed.

January 8.—On admission, patient complains of weakness and loss of appetite. Has no pain in side, but little dyspnœa. Pulse 106; respiration 36; temperature 103°. Tongue coated, lips parched, bowels confined, urine scanty and high-colored. Complete dulness over left lung as high as angle of scapula; slight increase of fremitus, bronchial breathing, crepitant and subcrepitant râles. Ordered am. carb., gr. x, quin. sulph., gr. ii, every two hours, and oz. viii of wine, also two bottles of porter. At 5 P.M., temperature 103°; ice-bag to chest. At 9 P.M., temperature 101½°; at 12 M., temperature 100°. Ice removed.

January 9, 10 A.M.—Pulse 80; respiration 24; temperature 99½°; feels well; treatment continued, excepting ice. 5 P.M., patient has slight headache; skin hot and dry; temperature 103°. Ordered two pounds of ice in bag to chest. 8 P.M., temperature 102°.

January 10, 1 A.M.—Temperature 100°. Ice having been on eight hours, is now removed. 10 A.M., feels comfortable, except has pain in affected side, which he says is sore and stiff, and interferes with his breathing. Ordered cups iii to chest, over left lower lobe. Temperature normal; treatment continued.

January 11.—Condition is improving, but pain is still considerable. Pleuritic friction heard at point of pain. Temperature 99°. Ordered cups repeated.

January 12.—Patient convalescent.

January 16.—Patient discharged, cured.

Case III.—E. W., aged 39, England, seaman; general health good; had typhoid fever eight months ago. During last twenty years has been a periodical imbiber; was on a spree two weeks previous to present attack.

Five days before admission, was attacked with severe chill and rigor, cough, and pain in left side, under nipple, and behind, over lower lobe. Remained in bed a day and a half, then got up. Had another chill, and pain in side of greater intensity, which compelled him to take to his bed, where he remained until admission, three days afterwards.

On admission, January 8, patient suffers from pain in left side, with hurried superficial respiration. Pulse 120; respiration 44; temperature 105°. Face flushed and hot, tongue dry and coated brown in centre, lips parched, great thirst, surface of body hot and dry, urine high-colored and scanty. Has an anxious expression of countenance. Physical examination shows over left lower lobe, behind, dulness, increased fremitus, bronchial respiration. Crepitant and subcrepitant râles. Exaggerated sounds over upper lobe, and opposite lung. 5 P.M., ordered ammon. carb., gr. x, quin. sulph., gr. ii, every two hours, also sponged down for twenty minutes. Ice-bag applied to chest during the night. Whisky, oz. i, every hour.

January 9, 2 A.M.—Temperature 101°; ice removed. 10.30 A.M., pulse 108; respiration 36; temperature 104°. Passed a pretty comfortable night; slept several hours. P.M., ice re-applied. 4.30 P.M., temperature 103°; pulse 104; respiration 40. 9 P.M., temperature 101°; ice having given out, ordered cold pack. 11 P.M., temperature 100°.

January 10, 10 A.M.—Pulse 108; respiration 30; temperature 101°. Spent a restless night; somewhat delirious; is now easier, and inclined to sleep; no pain, and but little dyspnœa. Ordered stimulating enema, as bowels are confined.

January 11, 10 A.M.—Pulse 92; respiration 32; temperature 101°; is very weak; had active delirium last night; enema caused two passages. Is now in cold perspiration; sleeping, with loud stertorous breathing and prolonged expiration; breathing interrupted; has subsultus tendinum; hard cough; sputa brown. Treatment continued.

January 12, 10 A.M.—Patient worse; pneumonia extended to right lung, upper lobe, also to left upper lobe. Breathes hurriedly; somewhat cyanosed; is stupid and

restless; subsultus continues, with carphologia. Ordered cups to left side. 4 P.M., pulse 104; respiration 38; temperature 104°.

January 13, A.M.—Typhoid symptoms prominent. Ordered ice to chest, and treatment continued. 12 M., temperature 101°; ice removed. Feels better now.

January 14.—This A.M. patient is delirious and very weak. Pulse feeble and intermittent; eats nothing. Temperature 100½°; pulse 116; respiration 30. 7 P.M., patient died.

Case IV.—R. H., aged 31, Ireland, domestic. General health good. Three days before admission, was seized with chills, irregular, and followed by sweating at night.

On admission, January 9, patient was suffering from great febrile movement; pain in left side at apex of lung; repeated epistaxis from left nostril. Temperature 103¾°; pulse 104; respiration 28. No pneumonic sputa; cough slight and dry.

January 10, 9.15 A.M.—Pulse 100; respiration 30; temperature 102¾°. Restless; severe pain in chest; surface hot and dry. Ordered ammon. carb., gr. x, quin. sulph., gr. ii, every two hours. 4 P.M., pulse 108; respiration 40; temperature 104¾°. Ordered ice-bag to chest. 9 P.M., temperature 102°. 11 P.M., temperature 100°. Ice removed.

January 11, A.M.—Pulse 104; respiration 30; temperature 102¾°. Patient feels better. 5 P.M., pulse 108; respiration 36; temperature 104¼°. Ordered ice to chest. 9 P.M., temperature 97⅘°. Ice removed; treatment continued.

January 12, 10 A.M.—Patient much better; no pneumonic sputa; pain almost disappeared. Temperature 103½°. Ordered ice to chest. 2.30 P.M., temperature 101°. Ice removed.

January 13.—Patient feels comfortable. Same treatment continued, ice being applied when temperature above 100°.

January 14.—Temperature normal, and patient gradually improving, and from this date rapidly convalesced.

Case V.—R. E., aged 32, boatman, admitted January 26, 1875. Family history unimportant; has always had good health; drinks, but not habitually. One week before admission, got his feet wet, and was shortly afterwards seized with vomiting and purging; had no pain at any point, no fever until three days after attack. On admission, patient is very feeble, has excessive diarrhœa, yellowish discharge; pulse weak, full, and soft, 100. Respirations accelerated, forty per minute; temperature 103½°. Is slightly delirious, talks incoherently; has considerable cough, but slight expectoration. Tongue coated brown, lips parched, and surface of body hot and dry. In front, has broncho-vesicular breathing; behind, ordinary signs of pneumonia over middle and upper lobes of right side.

Ordered carb. ammon., gr. x, and quin. sulph., gr. ii, every two hours, with extra diet, and oz. vi whisky per diem. Ice was ordered to chest at 6 P.M. Temperature 104°; pulse 124; respiration 30.

January 26, 2 A.M.—Temperature 100½°. Ice removed; patient states that he feels much better; pulse slower and of better volume, breathes more easily. 10 A.M.—Pulse 116; respiration 28; temperature 101°. Feels comfortable. 4.45 P.M.—Pulse 100; respiration 24; temperature 102½°; condition somewhat better. 6 P.M.—Temperature 103°; ordered ice to right chest. 12 M.—Temperature 100½°; patient comfortable, and dozing. Ice-bag removed.

January 28, 10 A.M.—Pulse 78; respiration 30; temperature 98½°. Slept soundly after removal of ice; bowels very loose, fæces still yellow. Patient is rational, and perspiring freely; pulse full, soft, and pretty good volume; tongue dry, and coated brown. Treatment, excepting ice, continued.

January 29, 10 A.M.—Pulse 70; respiration 28; temperature 97½°. Ordered bismuth, gr. xx, pepsin, gr. x, every three hours for three doses. Diarrhœa diminished; patient feeling well; no extension of pneumonic signs.

January 30, 10 A.M.—Pulse 84; respiration 26; temperature 97½°.

February 1, 10 A.M.—Patient feeling pretty well; no dyspnœa or pain at any point in chest; expectorates brownish sputa; pulse moderately strong, and but little accelerated. Physical examination shows subcrepitant râles over affected lobes. Treatment continued.

February 2.—Patient convalescent.

Case VI.—T. W., æt. 31, U.S., bricklayer, was admitted January 30, 1875, and treated precisely as the preceding cases, ice being used when temperature rose above 100°, and on February 4 pneumonia was resolving, and patient convalescent.

Dr. Thomson thought it was very important that physicians should keep reports of all cases they treat, both in hospital and private practice, and concluded by saying that he believed there were many men who had been in practice twenty years, and yet really had less experience than those who have had ten cases and studied them.

Dr. ALFRED L. LOOMIS: "We cannot treat pneumonia or any other disease unless we are familiar with the cause giving rise to its development. In pneumonia we have exciting and predisposing causes, and of all predisposing causes age is the most important. We rarely see this disease in young children; we see it most frequently between the ages of twenty and forty. The pneumonia we see in young children is bronchial pneumonia.

"We find also that climate has much to do as a predisposing cause of pneumonia. Those climates subject to sudden changes are more favorable to the production of pneumonia than those very high or very low.

"Intemperance and whatever interferes with health has very much to do with the development of pneumonia. My impression is that most cases of pneumonia met with are in persons who were not in good health before: hence I question very much that idiopathic pneumonia is frequently met with. If a man is charged with alcohol, for instance, and he places himself in a draught when heated, and gets pneumonia, is it an idiopathic pneumonia? It is alcoholic pneumonia. If a man under a malarial influence, as we all are in this city, exposes himself, and has pneumonia, it is not idiopathic pneumonia, it is malarial pneumonia.

"In regard to blood-letting in pneumonia, there are certain circumstances in which it is beneficial, but it would not be beneficial in a man suffering with malaria. We have two indications in the treatment of this disease: first, find its cause,—not the exciting cause, but the condition of the system preceding it. If the temperature is 104°, it is our duty to reduce it; if it does not rise above 103°, it is better to let it alone. The subject of cold as a means to reduce temperature has been ventilated; my own experience in regard to it, so far as it goes, is rather unfavorable. You can lower the temperature a degree or two by full doses of quinine, and I usually begin by giving gr. x, when the temperature is 105°. The second object in the treatment of pneumonia is to sustain the heart. So far as my experience goes, patients die from failure of the heart. As an agent to overcome heart-failure, alcohol is the remedy."

EXCISION OF THE BLADDER (*The Lancet*, January 9, 1875).—Dr. George Thomson reports a case of excision of the bladder occurring in a woman æt. 40, and following a fit of tenesmus brought on by acute cystitis. He believes the case to be unique.

REVIEWS AND BOOK NOTICES.

REPORT ON THE PROGRESS OF OTOLOGY. By C. H. BURNETT and CLARENCE J. BLAKE, M.D. Boston, 1874.

We do not, as a rule, notice pamphlets, but this very handsome pamphlet of seventy-three pages is seemingly so thorough and complete that we call the attention of all interested in otology to it, as a whole library in a paper cover.

PHARMACOGRAPHIA. A HISTORY OF THE PRINCIPAL DRUGS OF VEGETABLE ORIGIN MET WITH IN GREAT BRITAIN AND BRITISH INDIA. By FRED. A. FLÜCKIGER, Professor in the University of Strasburg, and DANIEL HANBURY, F.R.S. London, Macmillan & Co.

This handsome volume of nearly seven hundred pages is a work upon materia medica proper, avoiding altogether pharmacy and therapeutics, and not diving too deeply into the chemistry of the subject. Its exact scope may be gathered from the following sentence, which we extract from the preface: "It is, in fact, a record of personal researches on the principal drugs derived from the vegetable kingdom, together with such results of an important character as have been obtained by the numerous workers on materia medica in Europe and America." The book is undoubtedly one of permanent value, containing an immense amount of facts, most of which have been verified by the personal knowledge of the authors. There are described in it a number of drugs, such as the Indian Ipecacuanha, which are never seen in this country, and some of which, we believe, have not found their way even into the United States Dispensatory. The descriptions of the various recent efforts at the cultivation of drugs, in England, in Europe, and in the Tropics, are exceedingly interesting. Altogether, the book will for many years be of great value to all interested in materia medica.

GLEANINGS FROM OUR EXCHANGES.

TEST OF DEATH.—Dr. Angelo Monteverdi states, as the result of a great number of experiments, that the subcutaneous injection of liquid ammonia produces invariably a vinous red spot, with very sensible projection of the hair-bulbs, while in real death these are as invariably absent.—*Arch. di Med., Chir. ed Igiene.*

REMARKABLE CASE OF FASTING (*Peninsular Journal of Medicine*, January, 1875).—Dr. A. A. Whitney reports a case of persistent fasting occurring in a man æt. 75, who for seven weeks took only about two ounces of solid food and a similar amount of liquid nourishment. There were periods of from ten to eighteen days when absolutely nothing but water and ice was taken.

He was suffering from religious melancholia, and made three unsuccessful attempts at suicide, but finally died from exhaustion produced by his voluntary starvation.

INFLAMMABLE GAS FOUND IN THE STOMACH (*Irish Hospital Gazette*, January 1, 1875). — Dr. Heynsius relates the case of a man who suffered violent eructations after eating, and on four occasions the gas which was discharged had caught fire, burning his lips and nose severely. He had symptoms of acid dyspepsia, with dilatation of the stomach, probably the result of a stricture of the pylorus. The vomited matter was examined, and the gas which it generated was found to consist chiefly of hydrogen and carbonic acid. In the distillate butyric acid was found, and the phenomenon was probably due to butyric acid fermentation, the hydrogen being the cause of the inflammability of the ejected gas.

FATTY DEGENERATION OF THE HEART IN ADVANCED LIFE (*The Lancet*, January 9, 1875).—Dr. L. H. Jayne believes feeble, irregular, or intermittent pulse, dyspeptic symptoms, epigastric pain, frequent vomiting, more especially after taking food, and diarrhœa, to be diagnostic of fatty degeneration of the heart in old people.

NOTES AND QUERIES.

1729 CHESTNUT STREET, February 13, 1875.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—Early in March the buildings long known as the "Philadelphia School of Anatomy" will be destroyed for the new post-office. In response to a number of requests, I am endeavoring to gather the facts of its history for a concluding lecture. Many of the lecturers who have given courses in the two buildings are either personally unknown to me, or I may be ignorant even of the fact that they ever have lectured there at all. May I, therefore, take this method to ask them, through you, for all the information they can give me *at once*, either as to their own lectures or those of others, or in general any facts referring to its history? I want not only to be thus as accurate as I can, but also to obtain many facts which must otherwise be lost. I would like to know not only the lecturers who have been connected with it, but also what work they did, whether literary, experimental, physiological, etc., while connected with it, for all this is a part of its history. Personal reminiscences, anecdotes, etc., I would be glad also to gather.

The lecture will be delivered in the Philadelphia School of Anatomy at 8 o'clock P.M., March 1, 1875, and I extend to the profession, and especially to those who have ever taught within its walls, a cordial invitation to be present.

Very truly, yours,

W. W. KEEN, M.D.

WE have received a note from Dr. W. W. King, stating that in his letter to Mr. Fairthorne, published some weeks since in the *Philadelphia Medical Times*, it was inadvertently omitted that he employed chloral as an antiseptic as early as the latter part of 1871,—so far as his knowledge goes a year or more before the subject was noticed in the medical journals.

PROF. HARVEY L. BYRD, of Baltimore, has written us a letter containing a published card in regard to the resignation of Dr. W. W. Murray and himself from the College of Physicians and Surgeons of that city. The card is so long that we can hardly spare the space for it here. Our Baltimore correspondent supposed that the disagreement of the faculty was concerning the filling of certain chairs; but from the card it appears that the trouble grew out of this election indirectly. Dr. Murray says, "I resigned my professorship not because of the election or non-election of any one, but because I believe that I have, under cover of law, been deprived of a constitutional right or prerogative of which the Faculty had no *moral* right to deprive me."

WEVILL FUND.

Dr. Thomas G. Morton	$20.00
" R. J. Levis	20.00
" H. Yale Smith	10.00
" J. J. Kirkbride	5.00

PHILADELPHIA COUNTY MEDICAL SOCIETY.

THE next conversational meeting will be held at the hall of the College of Physicians, Wednesday, February 24, at 8 o'clock P.M.

Dr. James H. Hutchinson will read a paper on "The Use of the Ophthalmoscope as an Aid in the Diagnosis of Cerebral Disease."

The medical profession in the city are cordially invited.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM FEBRUARY 9, 1875, TO FEBRUARY 15, 1875, INCLUSIVE.

ROSE, GEORGE S., ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 24, A. G. O., February 8, 1875.